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CIA Comments on the Israeli Air Campaign: 5 - 10 June 1967

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14 August 1967

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COMMENTS ON THE ISRAELI AIR CAMPAIGN: 5 - 10 JUNE 1967

The following information is in response to a request from Mr. Robert Valtz, Deputy Assistant Secretary of Defense for Regional and Resource Analysis, for additional data on the Israeli air campaign of 5-10 June 1967. His specific requirements are underlined and followed by our comments. A table showing damage to the Arab airfields is appended.

1. Data on airfields attacked in Egypt, Jordan, and Syria.

a. Number of aircraft at each field before attack.

The number of Arab aircraft at each field immediately before the Israeli attack is unknown.

b. Number of planes destroyed, number of planes damaged but which could be repaired within one or two weeks.

25X1D The attached table summarizes the numbers of Arab aircraft destroyed at each field [redacted] 25X1D

[redacted]

Given these limits, 256 aircraft are counted as destroyed. This represents almost 57 percent of the 452 aircraft the Israelis claim to have destroyed. If we take into account that at least 30 and probably around 60 Arab aircraft were downed in air-to-air combat, some 63-70 percent of the Israeli claim can be accounted for. An additional consideration is the

25X1D fact that some Arab airfields -- probably about six or seven [redacted]

2. There are certain difficulties, however. The [redacted]

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Contrary to reports in public media, Al Arish airfield was bombed. [redacted]

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It is impossible, therefore, to say how many aircraft were for all practical purposes destroyed and how many were left repairable. The time needed to repair damaged aircraft is unknown. We have one report that as of early August about 100 UAR aircraft had been, or soon would be, repaired and returned to service.

c. Defenses at each field

(1) Active defense: i.e., AAA by caliber, SAM's, airborne interceptor aircraft. To what extent were the Arabs able to use AAA-SAM equipment?

(2) Passive defense: i.e., revetments and shelters.

The defenses at each field varied. Most seem to have had some kind of AAA, and most Israeli losses can be attributed to it. Reports vary as to the effectiveness of Arab air defense. Some say that most Israeli aircraft were hit; some say that most Israeli aircraft were untouched. [redacted]

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The Egyptians fired something like half a dozen SAMs. It is possible that one Israeli plane was downed by a SAM, but this cannot be confirmed. For the most part, the Israeli aircraft stayed well below the effective altitude of the SA-2.

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[redacted]

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Rumors persist that the Egyptians built some underground hangars, using straight stretches of road for air strips, and that the Israelis neutralized these stretches of road. We have no information to confirm or negate these rumors, but they appear unreliable.

d. Number of aircraft Israelis allocated to each airfield.

The Israelis used varying numbers of aircraft in their attacks. In general, they struck in flights of four aircraft at a time.

We have eyewitness reports of two attacks, the ones on Damascus and Amman. Damascus was hit by four flights of four aircraft each over a two-hour period. The number of aircraft attacking Amman is unknown; individual attacks were made by flights of four aircraft.

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[redacted]

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[redacted] It appears that the Israelis attacked each field only as often as necessary until they were satisfied that the field was out of commission or all the aircraft on it destroyed.

e. Number of Israeli aircraft lost, by airfield.

The Israelis lost about 46 aircraft during the war. One of these was a Noratlas destroyed by strafing in one of the very few Arab attacks on an Israeli airfield. We don't know which airfield this was. Two Mirages and one Vautour were lost in the second attack on H-3 in Iraq. These planes were downed by Iraqi aircraft while on bombing runs. These are the only losses for which the place and cause are known.

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f. Number of passes per Israeli aircraft.

[redacted]

This tactic appears to have applied only to attacks on airfields but even then it was not followed in all instances, since we know from the attack on Damascus that rockets were used on some second passes and at least two airfields were apparently not bombed.

g. Munitions used and, to extent known, which ones accounted for the damage.

Only conventional munitions were used. These included bombs, rockets, and cannon. Napalm was apparently not used against airfields. The [redacted] damage to aircraft can be attributed largely, if not entirely, to 30 mm cannon using armor-piercing incendiary ammunition. Such ammunition was used in the attack on the USS Liberty and would be the most logical choice for attacking aircraft on the ground. The actual mechanism of destruction was the ignition of fuel tanks; most of the Arab aircraft were apparently fully fueled and armed.

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The [redacted] damage to runways could have been caused by ordinary HE bombs. Much has been made of secret weapons and new types of bombs, but the available evidence shows no evidence of them. Accuracy in the bombing of runways may have been the secret.

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[redacted]

Two types of new bombs have been mentioned. Both are designed for low-level, high-speed delivery. They use either a parachute or retro-rocket to kill forward speed after release and then are driven into the runway by rockets attached to the rear. One type was intended to penetrate the runway before exploding. The other exploded on the surface, and its fragments were supposed to pit the surface enough to render the runway unusable.

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[redacted]

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[redacted]

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[redacted] Finally, in the 29 June 1967 issue of Flight International,

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a British aviation magazine, the runway at Jebel Libni was pictured with two shallow bomb craters very close together which the magazine attributed to a new type of Israeli bomb. [redacted]

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[redacted]

h. What information is available on multiple kills of aircraft?

There were multiple kills of aircraft both on the ground and in the air. On the ground the multiples were caused both by closely parked aircraft being set afire by adjacent aircraft which were struck by strafing passes, and by several aircraft being struck on the same strafing run. There apparently were several multiple kills in aerial combat during the war. This can be attributed both to the skill of Israeli pilots and the incompetence of Arab pilots. [redacted]

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[redacted]

2. Number of sorties flown by Israeli Air Force on each day of the war.

a. The number of sorties the Israeli Air Force flew can only be estimated. Various estimates place the rate at about four to eight sorties per day per operational aircraft. With a total inventory of about 240 aircraft, the Israeli Air Force could have flown 900 to 1800 sorties per day, at least in the first day or two.

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[redacted]

The high sortie rate was primarily due to:

(1) Excellent maintenance leading to in-commission rates varying from 93 to 100 percent of available aircraft.

(2) Short missions, many no longer than an hour and probably many others as short as half an hour.

[redacted]

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[redacted]

(3) Very short turn-around times, probably about ten minutes, perhaps less in some cases.

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25X1C (4) Apparently excellent pre-planning. [redacted]

(5) The fact that most missions were flown in daylight, giving ground crews the whole night for maintenance and repairs.

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b. Peacetime flying hours.

Israeli pilots reportedly fly more hours per month than those of any other air force. Regular IAF pilots fly every day, presumably five days per week. This would make monthly individual flying hours range around 30-40 hours.

c. Extent of maintenance standdown prior to hostilities.

The extent of any maintenance standdown prior to 5 June is unknown. It probably was not great for two reasons. First the normal state of maintenance in the IAF is extremely high. Second, the large influx of reserve pilots meant that many practice missions were needed. If there was a standdown, it was most likely on 4 June and the night of 4-5 June.

3. What was the allocation of Israeli aircraft inventory, by day, for close air support, air defense, counter-air, and aircraft left on the ground?

We can say very little about the allocation of aircraft by type and mission. On 5 June very few aircraft were held in reserve for air defense. General S.L.A. Marshall states that 12 aircraft were held on the morning of 5 June, when eight were sent up in response to Arab attacks. It is quite possible that there was not even this much of a reserve and that every flyable aircraft was sent to attack Arab airfields. The aircraft left behind probably were those that could not be made flyable in time.

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[redacted]

4. The number of Arabs killed and wounded and the number and type of equipment destroyed or damaged during the war. What percent of this was due to aircraft?

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25X1C Casualties and materiel losses due to air action can only be estimated in rough terms. [redacted]

The total number of killed in action may amount to some 15,000 - 20,000. Air action probably accounted for very few of those killed or wounded in action.

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Several factors indicate that the IAF may have had relatively good success against tanks. These include the IAF's control of the air, the open desert terrain, and the Arabs' habit of carrying external fuel loads on their tanks. At the same time, a tank is unlikely to be destroyed unless it is hit with bombs or rockets, although it may be disabled by machineguns and cannon. Also, the Korean war experience indicates that it is extremely difficult for an aircraft to destroy a tank.

On balance, it is likely that the bulk of the Arab armor that was destroyed fell to Israeli ground forces, especially tank forces whose primary mission is to counter hostile armor. Nevertheless, the IAF probably contributed substantially and was apparently primarily responsible for the damage done at the Mitla Pass.

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5. What munitions did the Israeli's use in close air support?

The munitions used in close support were 7.62 mm machine guns, 20 mm and 30 mm cannon of various types including AP incendiary, 82 mm rockets, and bombs. Napalm was used to a limited 25X1C
25X1C extent against concentrated targets. [redacted]

6. How many air-to-air engagements took place? What was the outcome?

Between 5 and 10 June something like 30-60 Arab aircraft were downed in aerial combat. The Israelis claim they did not 25X1C
lose a single aircraft in aerial combat. (No Arab has ever shot
25X1C down an Israeli in air-to-air combat.) [redacted]

7. Can we work out on a day-to-day basis the levels of close air support that were given to specific units (e.g., units of the size commanded by Generals Sharon, Tal, and Yoffe as well as their counterparts on the Jordanian and Syrian fronts)?

Information on the daily support given by the IAF to particular units is unavailable.

8. What is the assessment of the role of ground and air forces in the battles at Mitla Pass?

Initially, the Mitla Pass was an all-IAF show, and the IAF appears to have done nearly all the damage. The Israeli ground forces, which did not reach Mitla until the evening of 7 June, pretty much confined themselves to blocking foot troops trying to retreat through the pass.

9. Did the air or ground forces destroy the bridges over the Jordan River?

We do not know who destroyed the bridges over the Jordan.

10. Did the IAF play a role in blocking reinforcement of engaged units by battlefield reserves?

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[redacted]

11. Is there any evidence that the Israelis would have tried different tactics if their counter-air strikes failed?

We do not know what Israel would have done if the counter-air strikes had failed. Certainly there were plans taking that possibility into account. If the IAF had been forced to fight a relatively undamaged foe, it would have taken longer to establish air superiority, but there was never any doubt in the Israelis' minds as to the eventual outcome. An agreed community estimate before the war was that it would take the IAF from 24 to 48 hours to establish control of the air without a preemptive strike on Arab airbases.

25X1C [redacted]

12. Did the Israeli use much air at night?

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25X1C Reports on Israeli use of air at night conflict. [redacted]

13. We would like to add a comment on the Israelis' strategic concept of their air offensive. They obviously anticipated a short war and had limited objectives. This conclusion is based on the fact that they did not try to attack either the Arab air forces'

personnel or basic installations such as repair shops or depots. The sole focus of the initial attack was the neutralization of Arab air forces by destroying either their aircraft or their runways. Later, after air superiority had been gained, other installations such as radars and SAM sites were attacked to give the IAF freedom of movement over the battlegrounds.

This limited concept of operations has made it possible for the Arabs, especially the UAR, to reconstitute their air forces by patching runways and taking delivery of new aircraft. Morale factors aside, the only limit on the Arabs attaining their pre-war level of air capability is the speed with which new aircraft are delivered.

It seems obvious that greater efforts would have been directed at the basic structure of the air forces and personnel if Israel intended to carry the war into Egypt proper or if Israel had had any doubts as to its ability to swiftly defeat the Arab armies on the ground.

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